

Clean Copy Of The Pending Claims

sub 1
44. A surgical system comprising:
a hollow elongate instrument, having at least one lumen suitable for receiving an optical fiber, and being maneuverable to provide a conduit for transmission of laser energy to a surgical site; and
a flexible, elongate fiber for conducting laser energy from a proximal end of said fiber to a surgical site at a distal end of said fiber, the proximal end suitable for receiving laser energy, and said fiber being a silica fiber having a low hydroxyl ion content to reduce absorption of laser energy at a wavelength of about 1.4-2.2 micrometers.

2
45. The system of claim 44, wherein said fiber is suitable for coupling with and conducting energy of a Holmium-doped Yttrium-Aluminum-Garnet laser.

3
46. The system of claim 44, wherein said fiber is suitable for coupling with and conducting energy of a Erbium-doped Yttrium-Aluminum-Garnet laser.

4
47. The system of claim 44, wherein said fiber is suitable for coupling with conducting energy from a Thulium-doped Yttrium-Aluminum-Garnet laser.

5
48. The system of claim 44, wherein said fiber is suitable for coupling with and conducting energy from a Holmium-doped Yttrium-Lithium-Fluoride laser.

6
49. The system of claim 44, wherein said fiber is suitable for coupling with and conducting energy from a Erbium-doped Yttrium-Lithium-Fluoride laser.

Clean Copy Of The Pending Claims (continued)

- 1
50. The system of claim 44, wherein the said fiber is suitable for conducting pulsed laser energy.
- 8
51. The system of claim 44, wherein the said fiber is suitable for conducting pulsed wave laser energy sufficient to remove biological tissue by vaporization.
- 9
52. The system of claim 44, wherein said fiber is suitable for conducting laser energy with a pulse width of 0.2-5 milliseconds.
- 31 10
53. The system of claim 44, wherein said fiber is suitable for conducting pulsed laser energy at a repetition rate of about 1 to about 10 pulses per second.
- 11
54. The system of claim 44, wherein said fiber is suitable for delivery of energy to a surgical site of at least 0.57 millijoules per pulse.
- 13
55. The system of claim 44 wherein the fiber is suitable for conducting continuous wave radiation.
- 14
56. The system of claim 55 wherein the fiber is suitable for to photocoagulate tissue.
- 12
57. The system of claim 44 wherein the hollow elongate instrument is a catheter.
-